Foreword

s we embark on the 21st century, conserving our natural resources will be a necessity rather than an option. Energy efficiency will be at the forefront because it is financially, as well as environmentally, beneficial. Through energy efficiency, we can prevent pollution at a profit.

Energy productivity investment is most important to the business world, since the difference in gaining a profit or taking a loss is dependent on having a reliable power source and staying "connected." One also has to pay the bill, so there is no merit to using more than you must.

This guide – *Putting Energy Into* Profits, The Energy Star® Guide for Small Business - is designed to educate and assist the small business community in taking advantage of the benefits of energy efficiency. Whether you own your own building or are a tenant, you want lighting, heating, air-conditioning, and power for office equipment, and other services at the lowest possible

cost. This guide can help you identify building equipment and systems that need to be upgraded to help you save on your bottom line. We call this energy optimization; you will just call it smart business.

Along with the Energy Star for small business program, there are other complementary organizations, programs, and resources available to help small businesses stay competitive in today's economy. Two of these are the U.S. Department of Energy's Rebuild America program and the National Trust for Historic Preservation's National Main Street Center program.

Each of these programs offers a tremendous list of resources and experts. You can review some of them in the "Resources" section of this guide. The paragraphs below provide a brief overview of each of the programs that are "strategic partners" in serving small business, and that have contributed to the development of this guide.

About Energy Star for Small Business

ENERGY STAR for small business provides access to a range of technical materials and services. These services include a toll-free hotline at 1-888-STAR YES, and an award-winning Web site at www.energystar.gov for free engineering support, including all your questions, product information, and calculations. You can become an Energy Star partner through the hotline or Web site, and request publications, brochures, and information that you can use to highlight your "success story" for your customers and employees. There is even an annual national awards program.

You may discover that you can do certain projects in-house after reviewing the relevant publications, or you may decide to enlist the help of professionals.



Money Isn't All You're Saving

ENERGY STAR for Small Business 1200 Pennsylvania Avenue, NW Washington, D.C. 20460 I-888 STAR YES www.energystar.gov Regardless, Energy Star will help you become a smarter buyer thorough Energy STAR performance labeled products and free, unbiased technical support.

If you have access to the World Wide Web, we invite you to visit the Energy Star for small business Web site at www.energystar.gov. From there, you can explore the success stories, technical information, "tools" and services, as well as links to other energy-efficiency sites throughout the Internet.

Energy Star for small business is part of the overarching Energy Star program family, which works with many different facets of the home and workplace. Here is a list of the other Energy Star offerings you may want to explore in the future:

ENERGY STAR for small business for firms of 100,000 total square feet or less; call I-888 STAR YES, or visit www.energystar.gov

ENERGY STAR for businesses greater than 100,000 square feet; call 1-888 STAR YES, or visit www.energystar.gov

ENERGY STAR Service and Product Provider Directory for companies involved in the energy efficiency business, including Rebuild America Business Partners; visit www.energystar.gov

ENERGY STAR "store finder" directory of retailers that sell ENERGY STAR labeled products; call I-888 STAR YES, or visit www.energystar.gov

ENERGY STAR-labeled products for companies that sell or use computers, copiers, and other office equipment; call I-888 STAR YES, or visit www.energystar.gov/products

ENERGY STAR Homes for home builders, home buyers, and home-owners interested in greater efficiency; call I-888 STAR YES, or visit www.energystar.gov



Rebuild America U.S. Department of Energy 1000 Independence Ave., S.W. Washington, D.C. 20585 I-800-DOE-3732 www.rebuild.org

About Rebuild America

The U.S. Department of Energy's Rebuild America program is a network of community partnerships made up of local and state governments, schools, universities, housing agencies, and private businesses that save money by saving energy. These voluntary partnerships, working with support provided through the Department, choose the best ways to plan and implement energy efficiency projects in the commercial, institutional, and multifamily residential buildings controlled by their partners.

Partnerships have access to products, services, and peer experiences on buildings, energy, finance, and more. Rebuild America provides support nationally and leads by regional teams. It assigns a program representative to each partnership to help in identifying local resources, financing options, and accessing special services from Rebuild America to aid in completing upgrades to effectively use the performance contracting option, working with the National Association of Energy Service Companies for accreditation of ESCOs, and monitoring the impacts of utility restructuring on investment options.

Rebuild America Financial Services aids access to capital by pointing partnerships toward programs offered by states, associations, or private financing organizations that may be able to provide investment capital at the lowest possible rates.

About the National Main Street Center

The National Main Street Center is part of the National Trust for Historic Preservation. The Trust created the Main Street Approach to downtown revitalization, and promotes the use of the approach to communities to revitalize their traditional commercial areas. It serves as the nation's clearinghouse for information, technical assistance, research, and advocacy on preservation-based commercial district revitalization. The National Main Street Center's mission is to empower people, organizations, and communities to achieve ongoing downtown and neighborhood district revitalization based upon the principles of self-determination, resource conservation, and incremental transformation represented in the comprehensive Main Street Approach. The National Main Street Center's prime focus is to:

- Provide direct, on-site technical assistance to towns, cities, and urban neighborhoods.
- Publish a wide range of training materials (http://www.mainst.org/bookstore/bkmain.htm).
- Offer membership in the National Main Street Network, which includes Main Street News.
- Sponsor an annual conference, the National Town Meeting on Main Street.
- Offer a professional certification program, the Main Street Certification in Professional Downtown Management.
- Organize the Great American Main Street Awards annual competition.



National Trust Main Street Center 1785 Massachusetts Avenue, N.W. Washington, D.C. 20036 202-588-6219 www.mainst.org

Welcome

When you pay your electric bill or gas bill each month, you probably don't care too much about kilowatt-hours or therms. Whether you own your own building or are a tenant, you want light, hot water, air-conditioning, and other services at the lowest possible cost. The Energy Star® Guide for Small Business can help you get the most from your equipment and facility, and even help increase your profits. This is energy productivity; it is comparable to employee productivity.

In the "energy crisis" of the 1970s, conservation meant being colder in the winter and hotter in the summer. Saving energy meant sacrifice of comfort. Since then there have been tremendous advances in equipment, appliance, and product technology such as building systems and controls, and office equipment. As a result you can get reliable, affordable "off-theshelf" technologies that provide higher comfort, and higher quality business space for significantly less than you are currently spending.

Let's Look at Some **Examples**

Imagine a warehouse area that you just can't keep warm in the winter. Replacing the natural gas unit heaters with gas-fired radiant heaters can reduce your fuel use by 30 percent while keeping your employees comfortable so they can do their best work.

Say you have some incandescent floodlights mounted outside your building for security. Replacing this lighting equivalent with high-pressure sodium fixtures could save 80 percent of the electricity while increasing the light level (see page 44). That can save you big money. In addition, installing photocell controls will ensure that the lights will always be off during the day and on at night to deter vandals or burglars who may be lurking in the shadows.

Have you experienced eye fatigue or headaches from working under the flickering glare of older fluorescent lights? Do you have trouble viewing your computer monitor because the lighting in the room is too bright? Upgrading your existing lighting with newer products can increase visual comfort and allow you and your employees to get more work done while you spend 20 to 50 percent less on energy than with old equipment.

The Energy Star for small business program will help you apply solutions such as these to your business so you can save money, optimize energy use, and help protect the environment. As a partner in Energy Star for small business, you have access to unbiased information on building technologies and the upgrade process.

For more information, call us toll free at 1-888-STAR YES or visit our Web site at www.energystar.gov.

Where To Find What You Need in This Guide

We realize your time is critical to your business, so we've designed this guide to get you the information you need quickly. This section is your key to finding information in this guide.

Section 1, Getting the Job Done, gives you practical advice on how to

overcome the technical, financial, and managerial hurdles that you may encounter on the path to improving your bottom line through energy efficiency. In this section, we give you proven strategies to identify the best energy upgrades for your business. We also discuss how you can finance these upgrades, and we give you time-tested guidelines for selecting contractors to help you get the job done.

Section 2, Technical Support, describes the many technologies that can improve your energy efficiency. You probably expect that lighting, heating, cooling, and water heating are covered in depth; however, you may be a little surprised to find out how much money selecting the right office equipment can save. And we include a discussion of techniques to optimize your paper use that will save you money while preserving our nation's forests and landfill capacity.

Throughout Section 2 we identify simple measures that you can do yourself in just a few minutes. And for the more involved upgrades, we explain the solutions and the terms so that you can be a smarter shopper when interacting with contractors and suppliers.

Section 3, Supporting Material, contains a glossary that will help you understand unfamiliar terms and new technologies. There are tables you can use to compare your energy use and costs with similar businesses in your region. This section also has a checklist of ways to improve your facility's energy efficiency and a shopping list of things to look for when buying or leasing a building. We make celebrating your success easy with a card at the end of this guide that you can use to describe your upgrade projects. Your facility may be featured in an ENERGY Star success story, and your company can be publicly recognized for exemplary environmental responsibility in addition to good business practices.

Selected Reading

I've got no time.

Read "Finding the Time" and "Learning About Energy Efficiency" in Section 1. A consultant from one of the programs will be able to identify upgrade options for you with only a limited investment of your time.

I have access to in-house technical help.

Read Section 1 and then pass this guide to your in-house staff. One week later, schedule a meeting to review the technologies and upgrades that might be appropriate for your business, and establish a preliminary timeline.

I don't have technical staff and would likely contract out all work.

Read "Selecting a Contractor" in Section 1, then scan through this entire guide so you can determine which equipment to focus on and who to call for help.